

Catalog # BP19391c

MBD4 Antibody(Center) Blocking peptide Synthetic peptide

Specification

# MBD4 Antibody(Center) Blocking peptide - Product Information

Primary Accession

#### <u>095243</u>

# MBD4 Antibody(Center) Blocking peptide - Additional Information

Gene ID 8930

**Other Names** Methyl-CpG-binding domain protein 4, 322-, Methyl-CpG-binding endonuclease 1, Methyl-CpG-binding protein MBD4, Mismatch-specific DNA N-glycosylase, MBD4, MED1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage** Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### MBD4 Antibody(Center) Blocking peptide - Protein Information

Name MBD4 (HGNC:6919)

Function

Mismatch-specific DNA N-glycosylase involved in DNA repair. Has thymine glycosylase activity and is specific for G:T mismatches within methylated and unmethylated CpG sites. Can also remove uracil or 5-fluorouracil in G:U mismatches. Has no lyase activity. Was first identified as methyl-CpG-binding protein.

Cellular Location Nucleus.

# MBD4 Antibody(Center) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

Blocking Peptides

MBD4 Antibody(Center) Blocking peptide - Images



# MBD4 Antibody(Center) Blocking peptide - Background

DNA methylation is the major modification of eukaryoticgenomes and plays an essential role in mammalian development. Humanproteins MECP2, MBD1, MBD2, MBD3, and MBD4 comprise a family ofnuclear proteins related by the presence in each of a methyl-CpGbinding domain (MBD). Each of these proteins, with the exception ofMBD3, is capable of binding specifically to methylated DNA. MBD4may function to mediate the biological consequences of themethylation signal. In addition, MBD4 has protein sequencesimilarity to bacterial DNA repair enzymes and thus may have somefunction in DNA repair. Further, MBD4 gene mutations are detected in tumors with primary microsatellite-instability (MSI), a form ofgenomic instability associated with defective DNA mismatch repair, and MBD4 gene meets 4 of 5 criteria of a bona fide MIS target gene.

### MBD4 Antibody(Center) Blocking peptide - References

Arora, M., et al. Leukemia 24(8):1470-1475(2010)Thyagarajan, B., et al. Biol. Blood Marrow Transplant. 16(8):1084-1089(2010)Ho-Pun-Cheung, A., et al. Pharmacogenomics J. (2010) In press :Briggs, F.B., et al. Am. J. Epidemiol. 172(2):217-224(2010)Liu, C.Y., et al. Carcinogenesis 31(7):1259-1263(2010)